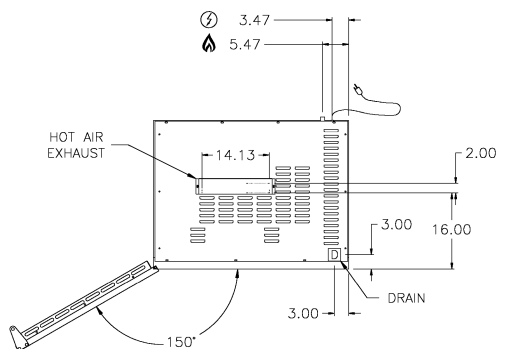


CR-32®

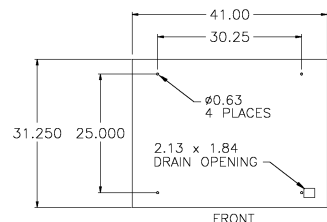
ROTISSERIE OVEN
FLOOR MODEL - GAS FIRED

MODEL: ☐ CR-32

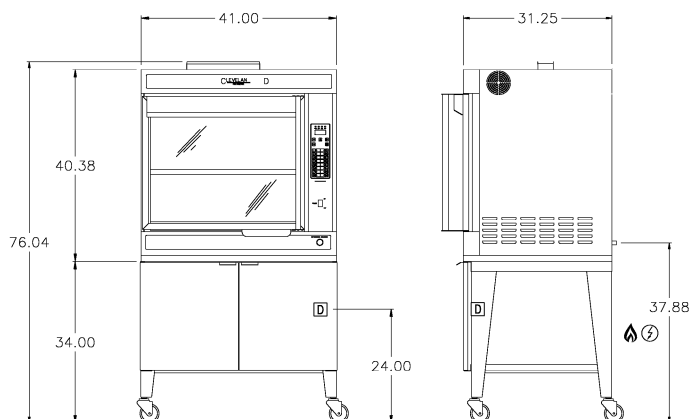


NOTE:

THE UNIT MUST HAVE BETWEEN 5 AND 14" OF NATURAL GAS PRESSURE WITH THE FACILITY IN FULL OPERATION.



TOP VIEW OF ROTISSERIE
SHOWING MOUNTING LOCATIONS






ITEM NUMBER _____

JOB NAME / NUMBER _____



SHORT FORM SPECIFICATION

CR-32 Rotisserie Oven: Dual rate, high and low fire stage burner. Three rotisserie speeds to dial in the right combination for perfect browning capabilities. 16 programmable menu buttons with auto hold feature.

MODEL	CAPACITY	INPUT CHART	SERVICE CONNECTIONS	INSTALLATION NOTES
CR-32	8 Skewers or 8 Turkey Baskets	Natural Gas 60,000 BTU per hours max.	<p> Electrical Connection - supplied with 8 ft. cord</p> <ul style="list-style-type: none"> - 1 PH grounded outlet - 9 AMP max. <p> Gas Connection - 3/4" NPT</p> <p> Drain - Drain Kit supplied with Rotisserie</p>	<p>Suitable for installation on combustible floors</p> <p>Min. clearance to combustible or non-combustible walls: Sides - 3", Back - 6"</p> <p>Gas Pressure Required: Natural - 5"-14" WC Propane - 11"- 14" WC</p> <p>Normal Supply Pressures</p> <p>Gas Input Ratings - Ratings shown are for Natural and LP Gas installations Specify altitude of project if over 2000 ft. (610 meters) For other gases specify type, calorific value, specific gravity and pressure at appliance</p> <p>NOTE: When ordering specify type of gas to be used</p>

CLEVELAND RANGE
SEQUENCE OF OPERATIONS
CR-32 Rotisserie
(NCC Control)

When using these instructions refer to the CR-32 wiring schematic.

1. To turn the unit on, depress the red on/off rocker switch.
 - 120 VAC is sent to red power indicator (switch).
 - 120 VAC is sent to cooling fans.
 - 120 VAC is sent to combustion blower fan
 - The fan turns and the fan prover switch closes.
 - 120 VAC sent to pins T1 and T3 on the J3 (3-pin quick-connect) to the Relay and Motor Board.
 - 120 VAC is sent from pin T1 on J3 (3-pin quick-connect) to the normally open contacts of the K5 relay on the Relay and Motor Board.
 - 120 VAC is sent from pin T1 on J3 (3 pin quick-connect) to the normally open contacts of the K1 relay on the Relay and Motor Board
 - 120 VAC is sent to the primary of the computer transformer.
 - 24 VAC is sent from the secondary of the computer transformer to pins T2 and T3 on the J2 (12-pin quick-connect) to the Relay and Motor Board.
 - Computer displays “SYSTEM INIT” for 5 seconds followed by
 - 120 VAC is sent to the primary of the ignition transformer.
 - 24 VAC is sent from the secondary of the ignition transformer to:
 - Pin T1 on J2 (12-pin quick-connect) and the normally open K2 contacts on the Relay and Motor Board.
 - Pin T8 on J2 (12-pin quick-connect) and the normally open K4 contacts on the Relay and Motor Board.
 - Pin T5 on J2 (12-pin quick-connect) and the normally open K3 contacts on the Relay and Motor Board.
2. Computer goes into the preheat mode (with the door closed) and displays “PREHEAT XXX” (XXX is the oven temp)
 - The K2 relay on the Relay and Motor Board closes and 24 VAC is sent from pin T9 on J2 (12-pin quick-connect) on the Relay and Motor Board to the vent solenoid closing it.
 - The preheat program tells the Relay and Motor Board to send 85 VDC from pins T4 and T7 on J2 (12-pin quick-connect) to the drive motor
 - The motor turns the drive system at 3 RPM.
 - The K3 relay on the Relay and Motor Board closes sending 24 VAC from pin T12 on J2 (12-pin quick-connect) on the Relay and Motor Board to the ignition module.
 - Ignition module sends spark to the igniter.
 - Ignition module sends 24 VAC through the fan prover switch to the pilot coil and gas is sent to the pilot.

- Ignition module sends 24 VAC to the main (low) coil of the gas valve and gas (2.2" W.C. natural gas, 4.0" W.C. L.P) is sent to the infrared burner.
 - The spark ignites the gas.
 - At least .5 micro amps D.C. is received at the module in 4 seconds or the ignition module locks out and the alarm buzzer sounds.
 - The K4 relay on the Relay and Motor Board closes and 24 VAC is sent from pin T11 on J2 (12-pin quick-connect) on the Relay and Motor Board to the high coil of the gas valve and the gas pressure is increased (3.2" W.C. natural and 10.0" W.C. LP) to the infrared burner.
 - The K1 relay on the Relay and Motor Board closes after 5 second delay (allowing for pilot ignition) sending 120 VAC from pin T6 on J2 (12-pin quick-connect) on the Relay and Motor Board to the convection blowers.
 - The unit continues to heat until 10 degrees of the PREHEAT set point is reached.
 - If the measured temperature does not increase by 6 degrees every 2 minutes the display will show "SHORTED PROBE" or "FAULTY HEATER" and an alarm will sound.
3. Computer displays "READY" and sounds a series of beeps after reaching 10 degrees of the set point. Oven may now be loaded with product and appropriate cooking program initiated.
- When the door is open, breaking contact between pins 4 and 5 on the programmable controller, the display will show "DOOR OPEN" and the burner, convection blower motors, lights and rotisserie drive motor will not operate.
 - The drive can be advanced only when the door is open by depressing the jog button located on the front of the rotisserie, making contact between pins 6 and 7 on J1 (15-pin quick-connect) on the programmable controller. The rotisserie will advance at 3 RPM.
4. With the door closed, the computer begins the cooking mode
- The cook program tells the Relay and Motor Board to close the K5 relay and 120VAC is sent to the primary of the light transformer.
 - The secondary of the transformer sends 22.8VAC to the light energizing it. The lights do not energize in the preheat mode.
 - The cook program tells the Relay and Motor Board to close the K2 relay and 24 VAC is sent from pin T9 on J2 (12-pin quick-connect) on the Relay and Motor Board to the vent solenoid closing it. The vent will stay closed until the programmed temperature set point is reached. Then it will open and close within 2 degrees of set point. **NOTE: THE VENT IS THE PRIMARY TEMPERATURE CONTROL DEVICE IN THE COOK CYCLE-NOT THE BURNER.**
 - The Relay and Motor Board sends the appropriate voltage to the motor as programmed (1RPM = 30 VDC, 2RPM = 57 VDC, 3RPM= 85 VDC).
 - The motor turns the drive system at the proper RPM.
 - The K3 relay closes sending 24 VAC through pin T12 on J2 (12-pin quick-connect) on the Relay and Motor Board to the ignition module.
 - Ignition module sends spark to the igniter.

- Ignition module sends 24 VAC through the fan prover switch to the pilot coil and gas is sent to the pilot.
 - Ignition module sends 24 VAC to the main (low) coil of the gas valve and gas (2.2" W.C. natural gas, 4.0" W.C. L.P) is sent to the infrared burner.
 - The spark ignites the gas.
 - At least .5 micro amps D.C. is received at the module in 4 seconds or the ignition module locks out and the alarm buzzer sounds.
 - If the burner setting is high, the K4 relay on the Relay and Motor Board closes. 24 VAC is sent from pin T11 on J2 (12-pin quick-connect) on the Relay and Motor Board to the high coil of the gas valve and the gas pressure is increased (3.2" W.C. natural and 10.0" W.C. LP) to the infrared burner.
 - The K3 relay on the Relay and Motor Board closes after 5 second delay (allowing for pilot ignition) sending 120 VAC to the convection blowers.
 - The burner continues to heat 25 degrees above the set point, then it shuts down to begin again at set point (NOTE: THIS IS THE SECONDARY TEMPERATURE CONTROL).
 - This continues and changes only as the set points of the program change until the cook program ends.
5. When the cooking cycle has timed out the computer will go into the hold mode and display "HOLD".
- The K3 relay opens and the burner circuit is de-energized.
 - The K1 relay opens and the convection fan circuit is de-energized.
 - The K2 relay opens and the vent closes.
 - The signal is sent to the D.C. drive motor to drive at 1 RPM.
 - When the temperature drops below the hold set point the burner and convection fan circuits will start. **NOTE: DURING THE HOLD CYCLE THE TEMPERATURE CONTROL IS MAINTAINED BY THE BURNER AND CONVECTION FAN CIRCUITS.**
6. To turn the unit off depress the on/off switch.
- 120 VAC is removed from red power indicator (switch).
 - 120 VAC is removed from light switch.
 - 120 VAC is removed from combustion blower fan.
 - 120 VAC removed from the Relay Interface Board (RIB).
 - 120 VAC is removed from the primary of the ignition transformer.
 - 120 VAC is removed from the primary of the computer transformer.
 - 24 VAC removed from the secondary of the computer transformer to the computer the display is blank.
 - 120 VAC is sent to terminals 3 and 2 on the 30-minute timer.
 - For 30 minutes the cooling fans will be energized.

CLEVELAND RANGE
SEQUENCE OF OPERATIONS
BMR Rotisserie
(FAST Control)

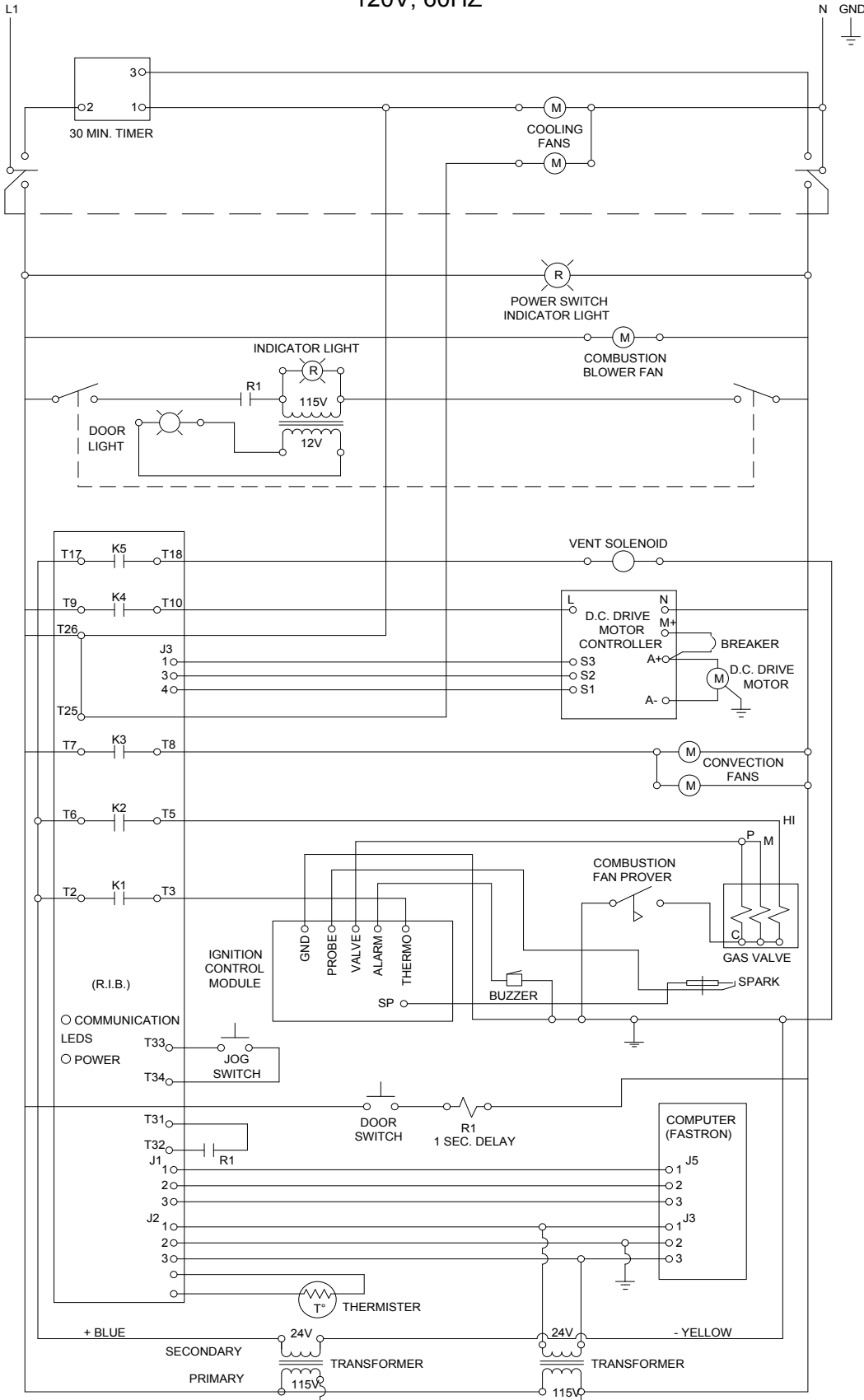
When using these instructions refer to the BMR wiring schematic.

1. To turn the unit on, depress the red on/off rocker switch.
 - 120 VAC is sent to red power indicator (switch).
 - 120 VAC is sent to cooling fans.
 - 120 VAC is sent to light switch
 - 120 VAC is sent to combustion blower fan
 - The fan turns and the fan prover switch closes (centrifugal and pressure switches are possible).
 - 120 VAC sent to the Relay Interface Board (RIB).
 - 120 VAC is sent to terminal T9 and the normally open contacts of the K4 relay on the RIB.
 - 120 VAC is sent to terminal T7 and the normally open contacts of the K3 relay on the RIB
 - 120 VAC is sent to the primary of the ignition transformer.
 - 24 VAC is sent from the secondary of the ignition transformer to:
 - Terminal T2 and the normally open K1 contacts on the RIB.
 - Terminal T6 and the normally open K2 contacts on the RIB.
 - Terminal T17 and the normally open K5 contacts on the RIB.
 - 120 VAC is sent to the primary of the computer transformer.
 - 24 VAC is sent from the secondary of the computer transformer to the computer.
 - Computer displays “init”
 - 120 VAC is sent to door switch.
2. With the door closed 120 VAC is sent to the 1.5-second delay relay R1.
 - 1.5 seconds later the normally open R1 contacts close.
 - 24 VAC is sent from the T31 terminal on the RIB through the now closed R1 relay contacts to T32 terminal on the RIB.
 - If the light switch is on, 120 VAC is sent through the now closed R1 relay contacts to the primary of the light transformer.
 - 12 VAC is sent from the secondary of the light transformer to the door lights.
3. Computer goes into the preheat mode and displays the internal temperature.
 - The K5 relay on the RIB closes and 24 VAC is sent from terminal T18 on the RIB to vent solenoid closing it.
 - The K4 relay on the RIB closes sending 120 VAC from terminal T10 on the RIB to the D.C. drive motor controller.
 - The RIB sends the signal voltage to D.C. controller
 - D.C. drive motor controller sends 85 VDC to the motor

- The motor turns the drive system at 3 RPM.
 - The K1 relay on the RIB closes sending 24 VAC from terminal T3 on the RIB through the fan prover switch to the ignition module.
 - Ignition module sends spark to the igniter.
 - Ignition module sends 24 VAC to the pilot coil and gas is sent to the pilot.
 - Ignition module sends 24 VAC to the main (low) coil of the gas valve and gas (2.2" W.C. natural gas, 4.0" W.C. L.P) is sent to the infrared burner.
 - The spark ignites the gas.
 - At least .5 micro amps D.C. is received at the module in 4 seconds or the ignition module locks out and the alarm buzzer sounds.
 - The K2 relay on the RIB closes and 24 VAC is sent from terminal T5 on the RIB to the high coil of the gas valve and the gas pressure is increased (3.2" W.C. natural and 10.0" W.C. LP) to the infrared burner.
 - The K3 relay on the RIB closes after 3 second delay (allowing for pilot ignition) sending 120 VAC from terminal T8 on the RIB to the convection blowers.
 - The unit continues to heat until the preheat set point (the lowest stage one setting) is reached.
4. Computer displays "rEdY" and sounds a series of beeps after reaching preheat set point. Oven may be loaded with product and appropriate cooking program initiated.
- When the door is open the R1 delay relay is not energized and the burner, convection blower motors, lights and rotisserie drive motor will not operate.
 - The drive can be advanced by depressing the jog button located on the front of the rotisserie, making contact between terminals T33 and T34 on the RIB. The rotisserie will advance at 3 RPM.
5. With the door closed, the computer begins the cooking mode
- The K5 relay on the RIB closes and 24 VAC is sent from terminal 18 on the RIB to vent solenoid closing it. The vent will stay closed until the programmed temperature set point is reached. Then it will open and close within 2 degrees of set point. **NOTE: THE VENT IS THE PRIMARY TEMPERATURE CONTROL DEVICE IN THE COOK CYCLE NOT THE BURNER.**
 - The K4 relay on the RIB closes sending 120 VAC to the D.C. drive motor controller.
 - The RIB sends the signal voltage to D.C. controller as programmed.
 - D.C. drive motor controller sends the appropriate voltage to the motor (1RPM = 30 VDC, 2RPM = 57 VDC, 3RPM= 85 VDC).
 - The motor turns the drive system at the proper RPM.
 - The K1 relay closes sending 24 VAC through the fan prover switch to the ignition module.
 - Ignition module sends spark to the igniter.
 - Ignition module sends 24 VAC to the pilot coil and gas is sent to the pilot.
 - Ignition module sends 24 VAC to the main (low) coil of the gas valve and gas (2.2" W.C. natural gas, 4.0" W.C. L.P) is sent to the infrared burner.
 - The spark ignites the gas.

- At least .5 micro amps D.C. is received at the module in 4 seconds or the ignition module locks out and the alarm buzzer sounds.
 - If the burner setting is high, the K2 relay on the RIB closes and 24 VAC is sent from terminal T5 on the RIB to the high coil of the gas valve and the gas pressure is increased (3.2" W.C. natural and 10.0" W.C. LP) to the infrared burner.
 - The K3 relay on the RIB closes after 3 second delay (allowing for pilot ignition) sending 120 VAC to the convection blowers.
 - The burner continues to heat 25 degrees above the set point, then it shuts down to begin again at set point.
 - This continues and changes only as the set points of the program change until the program ends then the display reads "done" and the unit beeps.
6. When the cooking cycle has timed out the computer will go into the hold mode and display "hold".
- The K1 relay opens and the burner circuit is de-energized.
 - The K3 relay opens and the convection fan circuit is de-energized.
 - The K5 relay opens and the vent closes.
 - The signal is sent to the D.C. drive controller to drive at 1 RPM.
 - When the temperature drops below the hold set point the burner and convection fan circuits will start. **NOTE: DURING THE HOLD CYCLE THE TEMPERATURE CONTROL IS MAINTAINED BY THE BURNER AND CONVECTION FAN CIRCUITS.**
7. To turn the unit off depress the on/off switch.
- 120 VAC is removed from red power indicator (switch).
 - 120 VAC is removed from light switch.
 - 120 VAC is removed from combustion blower fan.
 - 120 VAC removed from the Relay Interface Board (RIB).
 - 120 VAC is removed from the primary of the ignition transformer.
 - 120 VAC is removed from the primary of the computer transformer.
 - 24 VAC removed from the secondary of the computer transformer to the computer the display is blank.
 - 120 VAC is sent to terminals 3 and 2 on the 30-minute timer.
 - For 30 minutes the cooling fans will be energized.

ROTISSERIE, (FAST.) CONTROL
120V, 60HZ



ROTISSERIE (FAST.) CONTROL, 120V, 60HZ

